1. Record Nr. UNINA9910467476703321 Autore Budge Mervin C., Jr. Titolo Basic radar tracking // Mervin C. Budge, Jr., Shawn R. German Pubbl/distr/stampa Boston:,: Artech House,, ©2019 [Piscatagay, New Jersey]:,: IEEE Xplore,, [2018] **ISBN** 1-63081-336-2 Descrizione fisica 1 online resource (343 pages) Collana Artech House radar series Disciplina 621.3848 Soggetti Tracking radar Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Sommario/riassunto Detailed closed-loop bandwidth and transient response approach is a subject rarely found in current literature. This innovative resource offers practical explanations of closed-loop radar tracking techniques in range, Doppler and angle tracking. To address analog closed loop trackers, a review of basic control theory and modeling is included. In addition, control theory, radar receivers, signal processors, and circuitry and algorithms necessary to form the signals needed in a tracker are presented. Digital trackers and multiple target tracking are also covered, focusing on g-h and g-h-k filters. Readers learn techniques for modeling digital, closed-loop trackers. The radar circuitry/block diagrams necessary for range, Doppler and angle tracking are presented and described, with examples and simulations included. Factors such as noise and Swerling type fluctuations are taken into account. In addition to numerous worked examples, this approachable reference includes MATLABª code associated with analysis, simulations and figures. The book contains solutions to

practical problems, making it useful for both novice and advanced radar practitioners. Software will be available for download on this

page.