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A Generalized Model for Performance Analysis of Airborne Radar in Clutter Scenario

Authors : Vinod Kumar Jaysaval, Prateek Agarwal

Abstract : Performance prediction of airborne radar is a challenging and cumbersome task in clutter scenario for different types of targets. A generalized model requires to predict the performance of Radar for air targets as well as ground moving targets. In this paper, we propose a generalized model to bring out the performance of airborne radar for different Pulsed Repetition Frequency (PRF) as well as different type of targets. The model provides a platform to bring out different subsystem parameters for different applications and performance requirements under different types of clutter terrain.

Keywords : airborne radar, blind zone, clutter, probability of detection
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