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cross section of topics including basic radar functions related performance parameters radar range equation radar waveforms radar transmitters receivers and displays radar antennas and types of radar transmitter electromagnetic the transmitter generates powerful pulses of energy at precise intervals the required power is obtained by using a high power microwave oscillator such as a overview this text covers the basics of radar operations and theory provides a background into the many radar related areas and covers the electronic warfare issues from a radar perspective it is intended to give a background in radar theory including radar principles propagation radar signals resolution and the radar equation at the end of this chapter students should understand the fundamentals of radar and recognize the key performance parameters associated with primary radar specifications radar basics as we know that radar is the short form derived from radio detection and ranging it is mainly used to determine or detect that some object lies at so and so distance away this object is the one which can not be observed visually by the eye fundamental principles of radar is a textbook providing a first exposure to radar principles it provides a broad concept underlying the basic principle of operations of most existing radar systems and maintains a good balance of mathematical rigor to convince readers without losing interest a radar is an electromagnetic sensor used to notice track locate and identify different objects which are at certain distances the working of radar is it transmits electromagnetic energy in the direction of targets to observe the echoes and returns from them fundamentals of radar signal processing course description this course is a thorough exploration for engineers and scientists of the

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