

MODERN RADAR SYSTEMS

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ABSTRACT

The sensitivity of radar detection systems has increased about 35 db during each of the past two decades. Although there has been no specific indication that this sensitivity vs. time trend has leveled off, practical considerations of cost and complexity will undoubtedly influence this trend. The increases in sensitivity that have been achieved to date result from the use of larger antennas, higher powered transmitters, improved receivers and sophisticated data processing techniques. During the next decade electronically steered, multi-element array systems offer promise of providing additional increases in system sensitivity. These new systems, by the adaptive use of optimum scanning patterns and modulation waveforms, offer possibilities for more efficient utilization of power and time. The characteristics of several contemporary radar systems will be described.

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NOTES

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