Abstract

Through intensive study, it has been explored that multiple-input single-output (MISO) antenna systems have the potential to dramatically improve the performance of communication systems over single antenna systems. With the idea of implementing WiMAX MISO Communication Technology for overcoming the challenges offered by hostile channel and environmental effects,
Improvement In Target Detectability Through MISO RADAR

it leads the Technocrats to utilize this Technology in RADAR operations. In conventional RADAR, the target’s radar cross section (RCS) measurement at very low SNR level is very difficult and degrades the overall radar performance. The novelty of MISO RADAR is that it provides measures to overcome those degradations and provide higher range, cross range resolution. This paper explores enormous potential of MISO RADAR regarding the probability of target detection in low signal to clutter ratio (SCR) level.

Reference


Index Terms

Computer Science Communications

Key words

Signal to clutter ratio (SCR) Uniform Linear Array (ULA)
Radar cross section (RCS)

clutter

range

cross range

Cell Averaging

Constant False Alarm Rate (CFAR)