Jammer Signal Effectiveness Against a Conical-Scan Missile Seeker

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Abstract

Infrared (IR) guided missiles remain a threat to both military and civilian aircraft, and as such, the development of effective countermeasures against this threat remains vital. A simulation has been developed to assess the effectiveness of a jammer signal against a conical-scan seeker by testing critical jammer parameters. The critical parameters of a jammer signal are the jam-to-signal (J/S) ratio, the jammer frequency and the jammer duty cycle. It was found that the most effective jammer signal is one with a modulated envelope.