



Electro-Optics Symposium
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Advanced Missile Warning Sensors Design and Limitations

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Abstract:

The missile threat to many types of platforms is increasing. Especially the proliferation of man-portable guided missiles MANPADS create an urgent and growing threat for military and civilian airborne systems and encourages development of countermeasure technologies. Shown is the sequence of detection, tracking and countermeasures based on decision principles. For optimization of warning sensor band selection the knowledge of spectral missile signatures, backgrounds and atmospheric propagation under different conditions are necessary. The selection of single and dual color IR and single and dual color UV warning is discussed. Sensors like MILDS (UV, CASSIDIAN) and MIRAS (Multi Color Infrared Alerting Sensor, Thales/CASSIDIAN) are shown as examples. Sensor coverage during take off and landing is discussed taking into account aerooptic and plume effects.

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