

**UNIVERSITI TEKNOLOGI MARA**

**THE EFFECT ON MOVEMENT  
INCONSISTENCY TO THE  
PERFORMANCE OF  
FORWARD SCATTER MICRO-  
SENSORS RADAR**

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## ABSTRACT

The study unveils the effect on inconsistency movement target in radar applications. Radar used for this under test output is a special type of radar system and known as Forward Scatter Radar (FSR). This type of radar system operates when the transmitted energy is scattered by the target and the receiver captured the target silhouette area as a radar output. Recent works shows that FSR can effectively use for (ATC) automatic target classification. However, in order to gain high accuracy in classification all parameter and radar effect should be analyzed, studied and finalized.

In this case, the performance analysis of FSR will be proposed by comparing various trajectory angles and movement target signature with idealized condition of FSR system. All simulation will carry out using MATLAB software. The expected designated simulation results obtained will be recognized and classified by the system then will graphically compare. From the results, a database and analysis of system performance can be drawn as a guideline for future works.

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