

An Analytical Model for VBIED Fragment Throw

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The growing threat of terrorism requires security agencies to assess the weapon effects of Vehicle-borne Improvised Explosive Devices (VBIEDs), in order to design mitigation measures for building protection and determine safe stand-off distances from such threat for event security management. There is a lack of open source data especially on the debris effects from VBIED. To overcome this, a full scale VBIED test was conducted with debris pick up. An analytical mode for the debris throw is then derived based on the collected data to provide qualitative hazard-distance predictions.