

COLLATERAL CONCERNS IN CONJUNCTION WITH BLAST EFFECTS FROM WEAPON ENGAGEMENTS

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ABSTRACT

NATO requires the assessment of weapon effects including collateral damage and risk estimate distances in advance of weapon engagements. In Germany BAAINBw K1.2 is responsible for providing the respective methodologies and data. On behalf of BAAINBw K1.2 IABG develops UniVeMo (Universelles Verwundbarkeits-Modell) the accredited German standard vulnerability/lethality evaluation tool.

This paper provides an overview of the status of current German standard methodologies to address blast related collateral damage for persons in a building.

Starting from scenario requirements the benefit of modern flexible, scalable weapon concepts is addressed and the influence on limiting collateral damage is shown. Test results and sample applications will convey an inside view of blast phenomena related to collateral concerns.

This paper addresses topics like

- Collateral targets/scenarios
- Weapon performance
- Target vulnerability/structural response
- External/contact/internal detonations
- Collateral effects radius

in conjunction with weapon engagements.