Internet Applications for Predicting Blast Damage

Blast Standoff Application

Researchers at the Army Engineer Research and Development Center (ERDC; Vicksburg, Mississippi) developed the Blast Standoff Application which provides rapid calculation of recommended separation/standoff distance needed for a protected asset against an explosive threat (Figure 1). The application calculates minimum standoff needed for typical base camp assets and explosive blast events. The application uses data and algorithms used in other engineering analysis applications, such as iso-damage curves from ERDC’s Anti-Terrorism Planner and the barrier damage algorithm from ERDC’s Barrier Damage Assessment Module. The Blast Standoff Application can be found on the U.S. Army Corps of Engineers Reachback Operations Center Reachback Engineer Data Integration Force Protection Portal (https://erdc-fp.usace.army.mil).

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FIGURE 1: Opening screen of the Blast Standoff Application (Figure used with permission from the authors)