

ANALYSIS OF FIELF TEST RESULTS OF THE INJURY POTENTIAL FROM A VARIETY OF BLAST SOURCES IN VENTED ENCLOUSERS

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During 1991 and 1992 a series of tests were conducted at the newly constructed Norwegian Defense Construction Service (NDCS) test facility at Terningmoen, Norway. The tests consisted of firing a variety of recoilless rifles from several enclosures and internal detonations of C-4. The study was divided into technical and medical sections. The technical section was designed to evaluate the propagation of overpressure waves in each of several enclosures. The medical section was designed to assess the risk of non-auditory injury in the enclosures, to provide data for validating injury predictive models, and to understand the biomechanical coupling process in a complex wave environment. Wall mounted overpressure gauges; animal mounted load gauges; and the blast test device (BTD) were used to measure the both over-pressure environment and the load distribution on the body.