

THE USE OF MULTIPLE FAE DEVICES TO SIMULATE A LARGE BLAST SOURCE

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A test was conducted in the summer of 1987 in which three large Fuel-Air Explosive (FAE) devices were functioned to form a single large detonable cloud. The total amount of fuel involved in the detonation was 3000 kg of propylene oxide. Both near field and far field pressure measurements were made. This paper presents the results of analyzing these pressure records and comparing them with prediction. Comparisons are also made with predicted high explosive blast waves for the purposes of establishing yield equivalency. These comparisons are made on both peak pressure and impulse. Typical wave forms are also presented and the advantages and disadvantages of using this procedure to simulate high explosive charges are discussed.