

The technique with distributed charges in shock tubes for fullscale test in order to increase the duration of the waves has been reported earlier, (ref 3, 4 and 5). The knowledge of this method might be somewhat completed by this paper due to the differences in geometry compared with other tests reported.

The FortF Shock tube III has an almost constant crosssection area of 4.40 square metres over a length of about 220 m. The behaviour of a long duration pressure pulse from a distributed charge can therefore be studied for a time of about 1 second without rarefaction effects caused by expansion cones etc. From the experimental results a simple linear model of the shock wave formation is suggested. The practical problem with the implementation, especially the repeatability, are somewhat discussed.

The test series was initiated by the need of a suitable load to test a fireprotecting door for a fortification. This door was expected to withstand a low leakage pressure from the main shockwave barrier. The door was tested in April 1984 after a limited series of about 20 calibration shots.

The accuracy, especially at the lowest levels can not be compared with the HE charges used for high levels. It is estimated to +/-20 %.