

CHARACTERISATION OF NEW DRIVER CHARGE WITHIN THE 2.4M DIAMETER SECTION OF THE AIR BLAST TUNNEL AT FOULNESS

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ABSTRACT

The Air Blast Tunnel (ABT) is a facility designed to replicate the blast environment that would be created by a very large explosion. Its conical design enables the blast wave from a charge of no more than a few kilogrammes to be constrained and directed to generate a long duration blast pulse characteristic of a detonation of a few kilotonnes of TNT equivalent.

This paper summarises a series of trials conducted in March 2016 designed to test and characterise a new driver charge developed to produce a specific blast environment within the 2.4m diameter section of the ABT.

The paper will demonstrate how the blast environment was characterised and show plots of static pressure. Blast parameters will be characterised from the pressure data and a conclusion drawn regarding the suitability of the data to match a specific blast requirement.