

## DESIGN AND TESTING OF NEW ‘MINI-BLAST TUBE’ BLAST SIMULATOR AT AWE

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A new blast tube has been designed and built at AWE. This capability is much smaller than other existing blast tunnels, and has been named the ‘Mini-Blast Tube’. This tube was rapidly designed and built to meet AWE programme objectives for new and improved blast diagnostics, which included feasibility testing of dynamic pressure sensitive paint in a blast environment.

This paper will describe how the design of the tube was derived from a set of high level system level requirements. The paper will describe the analytical models and Finite Element analysis, used to both inform the design of the tube, and the charge design.

This paper will describe the tests which were carried out at AWE to substantiate the design, and how model results compared to test results.