Abstract Submitted for the SHOCK07 Meeting of The American Physical Society

Shock Characterisation of a Carbon-Fibre Composite MICHELLE WILLOWS, QinetiQ, Farnborough, UK, WILLIAM PROUD, Cavendish Laboratory, University of Cambridge, PHILIP CHURCH, QinetiQ, Fort Halstead, UK — Composites provide a low-density alternative to many metals and alloys. Thay are increasingly used as structural components. In this paper carbon firbre re-inforced composite is characterised using a series of plate impact experiments using VISAR and manganin gauges as diagnostics. The results used to populate a hydrocode model and a ballistic impact scenario is used as a validation experiment.

William Proud Cavendish Laboratory, University of Cambridge

Date submitted: 23 Feb 2007 Electronic form version 1.4