

EXPERIMENTS IN THE USE OF EJECTORS TO REMOVE THERMAL RADIATION SIMULATOR PRODUCTS FROM BLAST SIMULATORS

GUEST, J.

It is proposed to use a multi-nozzle TRS as the thermal source in the LBTS. The removal of the TRS combustion products is essential if a plane shock wave is to be achieved and good data, particularly photographic, is to be obtained.

This paper will describe the details of experiments conducted in the ½ scale shock tube simulator at the SAIC test facility using the SAIC TRS unit and venturii style ejectors.

Details of the ejectors, their drive mechanism, and location will be presented along with measurements of their efficiency compared with alternative types. Temperature measurements were taken of the free field environment using aspirated thermocouples and this data will be presented along with the photographic records of events.