

PYRO SHOCK TESTS ON SPACE EQUIPMENT

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Pyrotechnic cutting devices, utilised to separate subsystems in spacecraft's, produce severe mechanical vibrations in the system. These vibrations may cause failures in critical components. Due to a lack of computational techniques, experimental verification of different assemblies is necessary.

Traditional shock testing devices are generally not appropriate to reproduce the required shock levels.

At the Royal Military Academy, Department of Civil Engineering, a pyrotechnical shock test facility was developed in 1994, originally to test electromechanical components of Ariane 5.