

ITOP 5-2-500

STATIC FIRING TESTS OF SOLID PROPELLANT ROCKET MOTORS

SCOPE

This ITOP describes procedures for the safe conduct of solid propellant rocket motor static firing tests. Static firing tests often assess the design and performance of motor components, such as the solid propellant grain, liner, motor case, nozzle, or igniter. Test techniques, instrumentation, data interpretation methods, facility hazards, and safety practices are presented. Static firing test guidance is provided and includes steps to assure facility and personnel safety. These test procedures are applicable to missile and rocket motor safety assessment programs as defined in ITOP 5-2-620, where the motors are subjected to extreme environmental stresses and subsequently static fired.