

Hot-Fire Testing of a 1N AF-M315E Thruster

This hot-fire test continues NASA investigation of green propellant technologies for future missions. To show the potential for green propellants to replace some hydrazine systems in future spacecraft, NASA Marshall Space Flight Center (MSFC) is continuing to embark on hot-fire test campaigns with various green propellant blends.

NASA completed a hot-fire test of a 1N AF-M315E monopropellant thruster at the Marshall Space Flight Center in the small altitude test stand located in building 4205. The thruster is a ground test article used for basic performance determination and catalyst studies. The purpose of the hot-fire testing was for performance determination of a 1N size thruster and form a baseline from which to study catalyst performance and life with follow-on testing to be conducted at a later date. The thruster performed as expected.

The result of the hot-fire testing are presented in this paper and presentation.