

SPACE PROPULSION SYMPOSIUM (C4)
Propulsion Technology (3)

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THE DEVELOPMENT OF HIGH PERFORMANCE BIPROPELLANT ROCKET ENGINE OF SMALL
THRUST CLASS

Abstract

The performance and characteristic of small bipropellant liquid rocket engine was summarized. In these years the small bipropellant liquid rocket engine with characters of smaller and faster response has been improved. The development and characteristic of the 40N thruster which represented the high performance bipropellant rocket engine internally is described in this paper. The 40N thrust rocket engine which overall target reaches international advanced level has better specific impulse performance, pulse quality, life capability and lighter structural weight. This engine can be used for the high accuracy control area such as orbit and attitude control for space vehicle, spacecraft docking and landing.