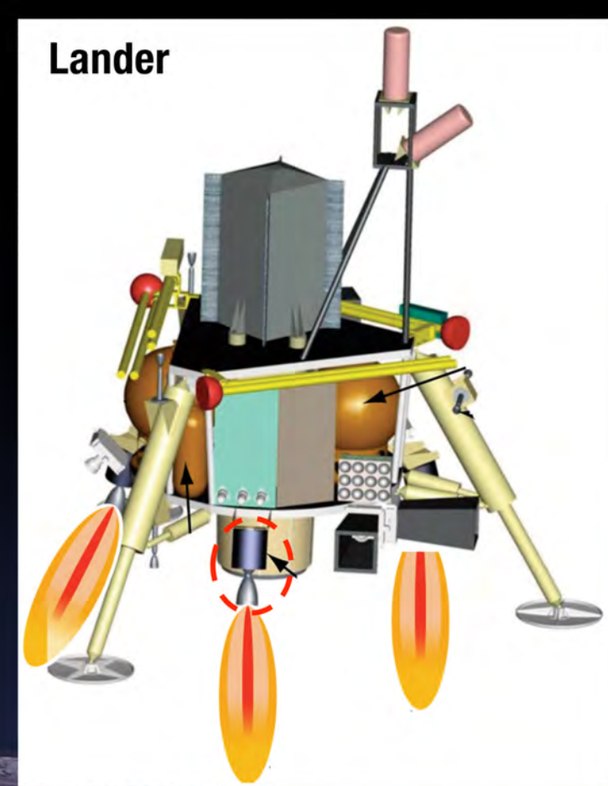
National Aeronautics and Space Administration

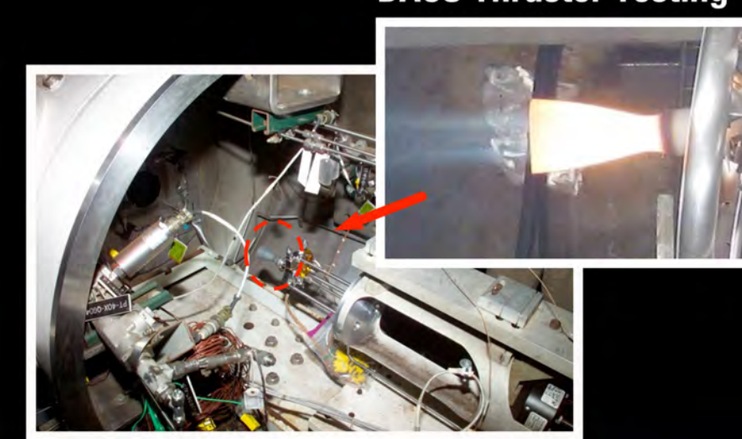
Robotic Lunar Lander Development Project

Propulsion Testing

Attitude Control System (ACS) Thruster



DACS Thruster Testing



Test Setup in Vacuum Chamber at WSTF

Divert Attitude Control System (DACS) Thruster

Accomplishments

- Conducted successful hot-fire test series with DACS thruster across a wide range of pulsing, power-level, and operating conditions
- Simulated mission profile from launch to lunar landing
- Demonstrated use of modified propellant to reduce heater power
- Met 100% of the hot-fire test objectives

Benefits of DACS Thruster Technology

- Low cost
- Smaller system volume (improved packaging)
- Lower system mass
- Lower minimum operating temperature (with modified propellant)

Future Work

- ACS thruster testing at White Sands Test Facility in April 2010

For more information go to <www.nasa.gov/roboticlander>.