

Lunar Reconnaissance Orbiter: Mission Overview

1. NASA Goddard Space Flight Center, Greenbelt, MD 20771, USA

NASA's Robotic Lunar Exploration Program (RLEP), formulated in response to the President's Vision for Space Exploration, will execute a series of robotic missions that will pave the way for eventual permanent human presence on the Moon. The Lunar Reconnaissance Orbiter (LRO) is first in this series of RLEP missions, and plans to launch in October of 2008 for at least one year of operation. LRO will employ six individual instruments to produce accurate maps and high-resolution images of future landing sites, to assess potential lunar resources, and to characterize the radiation environment. LRO will also test the feasibility of one advanced technology demonstration package. This paper will give an introduction to each of these instruments and an overview of their objectives.