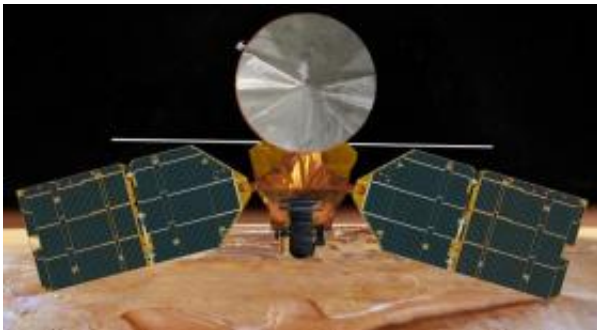


Mars Orbiter Resumes Normal Science Operations

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This artist's concept of NASA's Mars Reconnaissance Orbiter features the spacecraft's main bus facing down, toward the red planet.

(PhysOrg.com) -- NASA's Mars Reconnaissance Orbiter has fully recovered from an unexpected computer re-set last week and resumed its scientific investigation of Mars.

The mission's flight-team engineers at NASA's Jet Propulsion Laboratory, Pasadena, Calif., and at Lockheed Martin Space Systems, Denver, sent commands Monday, March 2, to power up the spacecraft's science instruments. Observations by the instruments resumed Tuesday morning after confirmation of instrument health and proper temperatures.

The Mars Reconnaissance Orbiter had rebooted its computer Monday morning, Feb. 23, and put itself temporarily into a limited-activity "safe"

mode that is an automated safety response. After analysis of the situation, including ground-based tests simulating the spacecraft events, engineers took the spacecraft out of safe mode on Saturday.

"We have proceeded cautiously, checking the health and performance of the spacecraft at each step as we brought it back to full, normal operations," said JPL's Dan Johnston, mission manager for the Mars Reconnaissance Orbiter.

The team found that a voltage reading might have triggered the Feb. 23 reboot and that the event could have resulted from a cosmic-ray hit causing an erroneous voltage reading. Ground simulations have confirmed the expected spacecraft behavior due to the erroneous voltage reading. Since the Feb. 23 event, the spacecraft systems have continued to perform as expected.

Provided by NASA

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