

Scientists save India's moon mission from failure

July 17 2009, By VIJAY JOSHI, Associated Press Writer



FILE - In this Sept. 18, 2008, file photo, India's first unmanned mission to the Moon, Chandrayaan 1 spacecraft is seen as it is unveiled at the Indian Space Research Organization (ISRO) Satellite Centre in Bangalore, India. India's maiden satellite orbiting the moon came close to total failure because of overheating but scientists made quickfixes to keep it going, and the mission is safe, officials said Friday. (AP Photo/File)

(AP) -- India's only satellite orbiting the moon came close to failure after overheating but scientists improvised to save it and have achieved more than 90 percent of the mission's objectives, an official said Friday.

The launch of Chandrayaan-1 in October 2008 put India in an elite group to have lunar missions along with the U.S., Russia, the <u>European</u>



Space Agency, Japan and China.

But on May 16, the satellite lost a critical instrument called the star sensor, the Indian Space Research Organization's chief Madhavan Nair told reporters.

The sensor helps the satellite stay oriented so its cameras and other recording equipment are constantly aimed at the <u>lunar surface</u>.

However, ISRO scientists were able to salvage the \$80 million satellite within a week and resume normal operations by activating the satellite's <u>gyroscope</u>, which also gives satisfactory orientation, Nair said.

He said more than 90 percent of the two-year mission's objectives had already been achieved, and dismissed suggestions that the sensor's failure might reduce the life span of the spacecraft.

The "life (of the spacecraft) is not dependent on this instrument. This instrument is used only for orientation of the spacecraft," he said.

"The sensor cannot be recovered at this stage and we hope that the remaining part of this mission will be completed," he said.

Nair told the NDTV television network earlier the <u>satellite</u> came close to overheating and failing after it was put into orbit 60 miles (100 kilometers) from the moon.

"The entire spacecraft would have baked and would have been simply lost," Nair said.

As India's economy has boomed, it has sought to convert its newfound wealth - built on the nation's high-tech sector - into political and military clout.



Scientists hope the Chandrayaan project will boost India's capacity to build more efficient rockets and satellites, especially through miniaturization, and open research avenues for young Indian scientists.

India plans to follow the Chandrayaan, which means "moon craft" in Sanskrit, by landing a rover on the moon in 2011.

©2009 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

Citation: Scientists save India's moon mission from failure (2009, July 17) retrieved 10 August 2024 from <u>https://phys.org/news/2009-07-scientists-india-moon-mission-failure.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.