

## India successfully puts spacecraft into lunar orbit

India Saturday successfully put its first unmanned spacecraft Chandrayaan-I into lunar orbit - a major step towards placing it in its designated slot 100 km from the moon, a top Indian space agency official said.

The spacecraft was placed in an elliptical orbit - at 7,500 km aposelene (farthest from moon) and 500 km periselene (nearest to moon) through complex manoeuvres, Indian Space Research Organisation (ISRO) director S. Satish told IANS here.

'The liquid apogee motor (LAM) onboard was fired for 805 seconds (13.4 minutes) between 5 p.m. and 5.15 p.m. to put the spacecraft into the elliptical orbit around the moon,' Satish told IANS.

In this orbit, the spacecraft takes 10 hours to complete one revolution around the moon.

Over the next two-three days, Chandrayaan will be progressively lowered to an orbit that will be 500 km aposelene and 100 km periselene.

'The spacecraft will be gently pushed to its designated slot in the lunar orbit and positioned at a distance 100 km from the surface of the moon,' Satish said.

The complex manoeuvres were executed by ISRO's telemetry, tracking and command network (Istrac) on the outskirts of [Bangalore](#) and monitored by its deep space network (DSN) at Byalalu, about 40 km from India's tech hub.

'The health of the spacecraft is good and its vital functions are operating normally,' Satish added.

The terrain mapping camera onboard will continue to take pictures of the moon's surface even as it revolves around its polar orbit.

Chandrayaan carries 11 scientific instruments, including six foreign payloads - two from the US, three from the European Space Agency (ESA) and one from Bulgaria. The remaining five are indigenously designed and developed by various centres of the state-run ISRO.

The spacecraft was blasted off Oct 22 onboard the 316-tonne Polar Satellite Launch Vehicle (PSLV-C11) from the Satish Dhawan space centre at Sriharikota spaceport, about 80 km north of Chennai.

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