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## Isro successfully completes key Gaganyaan test

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**NEW DELHI:** The Indian Space Research Organisation has successfully completed the service module propulsion system test for Gaganyaan at its Propulsion Complex (IPRC) at Mahendragiri, the space agency said on Thursday.

"ISRO successfully tested the Gaganyaan Service Module Propulsion System (SMPS) on July 19, 2023 at IPRC, Mahendragiri. This test involved five liquid apogee motor (LAM) engines with a thrust of 440 N and sixteen reaction control system (RCS) thrusters with a thrust of 100 N," Isro said in a statement on Thursday.



**ISRO successfully tests the Gaganyaan at Mahendragiri on Thursday.** PTI

The service module of Gaganyaan is a regulated bi-propellant based propulsion system that caters to the requirements of the orbital module, performing orbit injection, circularization, on-orbit control, de-boost manoeuvre

and SM based abort during the ascent phase.

The hot test of the system demonstration model (SDM) emulated the fluid circuit of the service module propulsion system, encompassing the propellant tank feed system, helium pressurization system, flight-qualified thrusters, and control components. Isro has scheduled five additional tests to demonstrate both nominal and off-nominal mission scenarios.

Isro's Gaganyaan project envisages demonstration of human spaceflight capability by launching crew of three members to an orbit of 400km for a three-day mission and bring them back safely to earth, by

landing in Indian sea waters.

According to Isro officials, the first hot test of the phase-2 test series demonstrated the integrated performance of the Gaganyaan Service Module Propulsion System. As part of the phase-1 test series of SM SDM, Isro had previously conducted five hot tests, totalling a duration of 2750 seconds.

The space agency is also preparing for the commercial launch of Polar Satellite Launch Vehicle-C56 (PSLV-C56), which is expected to be launched by the month end, senior officials said.

While the launch is tentatively likely to happen around July 26, an official date for the launch is yet to be finalised.

## CHANDRAYAAN-3'S 4TH ORBIT-RAISING COMPLETED: ISRO

**Press Trust of India**
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**BENGALURU:** Scientists on Thursday successfully performed the fourth orbit-raising manoeuvre of the Chandrayaan-3 spacecraft, the Isro said.

They performed the manoeuvre from the Isro Telemetry, Tracking and Command Network (ISTRAC). The next firing is planned for July 25 between 2 pm and 3 pm, the national space agency headquartered here said. India celebrates the International Moon Day 2023 by propelling Chandrayaan-3 a step closer to the Moon, it added.