'Gaganyaan crew escape system being tested'

Isro Chief's Advisor Explains Intricacies Of Mission

TIMES NEWS NETWORK

Ahmedabad: India's first indigenous manned space mission is scheduled for 2022, so scientists at the Indian Space Research Organisation (Isro) are working round the clock to fine-tune all systems to ensure success — from launch to the capsule's splashdown. Tapan Misra, the advisor to the Isro chairman, on Tuesday said that the crew escape system is being tested.

"The process was tested earlier last year. There are four rockets involved in the launch," said Misra on the sidelines of his talk, 'Indian Human Space Programme and its Legal Implication', at Gujarat National Law University (GNLU) on Tuesday. "The mechanism is devised in such a way that the rockets separate and go at angular directions to keep the crew safe," he said. "The successful rescue also depends on how quickly you act; as fire spreads quickly in a spacecraft. Other tests will also be conducted."

According to the Isro website, technology demonstration for the crew escape system was carried out on July 5 at Sriharikota. "The Crew Escape System is an emergency escape measure designed to quickly pull the crew module along with the astronauts to a safe distance from the launch vehicle in the event of a launch abort," the site says. "The first test (Pad Abort Test) demonstrated the safe recovery of the crew module in case of any exigency at the launch pad."

Misra, a former director of the Space Applications Centre (SAC), also gave a peek into India's endeavours for successful re-entry of the crew module. "Precise angle of entry is crucial to maintain optimum temperature," he said. He said that the final splashdown site can be decided only at the last stage, depending on multiple factors. In an answer to a student's query about the debris left behind by the A-SAT mission, Misra said that he was not a part of the initiative but can opine that due to the low-Earth orbit location of the mission, the debris will eventually disintegrate when entering the atmosphere and will pose no danger.

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- In his speech, Misra said that Columbus discovered the 'New World' and changed the course of history. He equated the human endeavour to reach out to stars with events that have changed the world forever. Misra said that the Apollo 11 mission had taken place at a time when technology was not very advanced and thus it motivated the team to invent new technology which resulted in industry spin-offs.

- Space missions have rules such as the Outer Space Treaty of 1967 and the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space of 1968.