

GOVERNMENT OF INDIA

DEPARTMENT OF SPACE

LOK SABHA

UNSTARRED QUESTION NO. 686

TO BE ANSWERED ON WEDNESDAY, JULY 23, 2025

GAGANYAAN MISSION

686. SHRI ALOK SHARMA:

DR. BHOLA SINGH:

SMT. MAHIMA KUMARI MEWAR:

MS. KANGNA RANAUT:

Will the PRIME MINISTER be pleased to state:

- (a) the details of the current status and key milestones achieved in the Gaganyaan programme, including the scheduled timeline for India's first human spaceflight;**
- (b) the details of the long-term objectives of India's human spaceflight initiatives including plans for establishing the Bharatiya Antariksha Station by 2035;**
- (c) the details of the steps taken by the Government to achieve its goal of sending an Astronaut to the Moon by 2040; and**
- (d) whether any Indian Astronauts have begun training in preparation for this mission and if so, the details thereof?**

ANSWER

**MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC
GRIEVANCES & PENSIONS AND IN THE PRIME MINISTER'S OFFICE**

(DR. JITENDRA SINGH):

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(a) The following is the current status & key milestones achieved in Gaganyaan Programme:

1. New Developments

- i. Human Rated Launch Vehicle (HLVM3): Development and ground testing completed.**
 - ii. Orbital Module: Propulsion systems for Crew Module and Service Module developed and tested. ECLSS engineering model realized.**
 - iii. Crew Escape System (CES): 5 types of motors developed and static tested.**
 - iv. Infrastructure established: Orbital Module Preparation Facility, Gaganyaan Control Centre, Gaganyaan Control facility, Crew training facility, Second Launch pad modifications.**
 - v. Precursor Missions: A Test Vehicle developed for validating CES and flight tested in TV-D1. Activities are in progress for TV-D2 and IADT-01.**
 - vi. Flight Operations and Communication Network: Ground network configuration finalized. IDRSS-1 feeder stations and terrestrial links established.**
 - vii. Crew Recovery Operations: Recovery assets finalized. Recovery Plan worked out.**
- 2. First Uncrewed Mission (G1): C32-G stage and CES motors realised. HS200 Motors and CES Fore end up to Crew Module Jettisoning Motor stacked. Crew Module and Service module structure realised. Crew Module Phase-1 checks completed.**

(b) The human spaceflight programme is aimed at fulfilling aspirations of an established space fairing nation. The technological and manufacturing capabilities towards the goal of 'Viksit Bharat' will hinge on a transformative shift in the national research and technology development landscape. After proving the basic capabilities for human space activities under Gaganyaan Programme, the next logical step is to initiate the development activities for a human habitat or a space station in the low earth orbit to enable longer human space missions. In this regard, the long-term vision of Indian Human Space Programme includes Bharatiya Antariksha Station (BAS) by 2035 and Indian Moon Landing by 2040.

Plans for establishing five modules of Bharatiya Antariksha Station (BAS) by 2035 towards which approval for development of 1st module of BAS is obtained.

(c) As per the vision envisaged by Government of India to land an Indian on moon by 2040, the mission aspects, configuration of launch vehicle and orbital module systems have been taken up.

(d) Training modules including incremental training for the ongoing Gaganyaan programme and proposed landing of an Indian on Moon is in line with the requirement of mission timelines.
