O.I.H.

GOVERNMENT OF INDIA

DEPARTMENT OF SPACE

RAJYA SABHA

**UNSTARRED QUESTION NO. 618**

TO BE ANSWERED ON THURSDAY, JULY 24, 2025

**GAGANYAAN MISSION**

618. SHRI SUBHASH BARALA:
SHRI BABUBHAI JESANGBHAI:
DR. KALPANA SAINI:
SHRI MOKARIYA RAMBHAI:

Will the PRIME MINISTER be pleased to state:

(a) the current status and key milestones achieved in the Gaganyaan programme, including the scheduled timeline for India's first human spaceflight;
(b) the long-term objectives of India's human spaceflight initiatives, including plans for establishing the Bharatiya Antariksha Station by 2035; and
(c) the steps Government is taking to achieve its goal of sending an astronaut to the Moon by 2040?

**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 current status and key milestones achieved in the Gaganyaan programme, including the scheduled timeline for India's first human spaceflight:

**New Developments**

1) **Human Rated Launch Vehicle (HLVM3):** Development and ground testing completed.

2) **Orbital Module:** Propulsion systems for Crew Module and Service Module developed and tested. ECLSS engineering model realized.
3) **Crew Escape System (CES):** 5 types of motors developed and static tested.
4) **Infrastructure established:** Orbital Module Preparation Facility, Gaganyaan Control Centre, Gaganyaan Control facility, Crew training facility, Second Launch pad modifications.
5) **Precursor Missions:** A Test Vehicle developed for validating CES and flight tested in TV-D1. Activities progressing for TV-D2 and IADT-01.
6) **Flight Operations and Communication Network:** Ground network configuration finalized. IDRSS-1 feeder stations and terrestrial links established.
7) **Crew Recovery Operations:** Recovery assets finalized. Recovery Plan worked out.
8) **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.
9) **The first crewed mission** is slated for launch by Q1 of 2027.

(b) & (c)

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. The long-term vision of Indian Human Space Programme includes Bharatiya Antariksh Station (BAS) by 2035 and Indian Moon Landing by 2040. Plans for establishing five modules of Bharatiya Antariksha Station (BAS) by 2035 include the launch of BAS-1 module by Jun' 2028 followed by a docking mission to BAS-1 by Dec' 2028. Subsequently, the remaining modules will be launched to have a fully operational BAS by 2035. As per the vision envisaged by Indian Govt to land an Indian on moon by 2040, activities are in progress at ISRO Centres to work out the mission aspects, configuration of launch vehicle and orbital module systems.

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