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ISRO launches NVS-03 satellite with pyro valves open

ISRO launched the NVS-03 navigation satellite from Sriharikota to boost NavIC reliability and overcome past technical hurdles.

NVS-03 is part of India's second-generation NavIC navigation satellite series aimed at providing accurate positioning and timing services.

KEY EXAM POINTS

- ISRO successfully launched the NVS-03 navigation satellite on **October 31, 2026**, from the **Satish Dhawan Space Centre** in Sriharikota, Andhra Pradesh.
- **ISRO Chairman V. Narayanan** stated that the satellite was flown with pyro valves open to overcome technical hurdles and ensure mission reliability.
- **Pyro valves** play a critical role in spacecraft propulsion systems, controlling fluid and gas flow during orbital maneuvers.
- The predecessor **NVS-02**, launched in **2025** as the second spacecraft in the NVS series, had encountered a mission failure.
- The mission was carried out using a **GSLV rocket** to place the second-generation navigation satellite into its intended orbit.

DID YOU KNOW..!?

Vikram Sarabhai Space Centre (VSSC) located in **Thiruvananthapuram** is the prime center for developing launch vehicle technology in India.

Satish Dhawan Space Centre (SDSC), formerly known as Sriharikota Range (SHAR), is India's primary spaceport located in **Andhra Pradesh**.

NavIC (Navigation with Indian Constellation) is India's regional satellite navigation system developed by **ISRO** , providing positioning service across the Indian mainland.

Geostationary Satellite Launch Vehicle (**GSLV**) is a space launch vehicle designed to launch heavier payloads into higher orbits using cryogenic upper stages.

ISRO was established on **August 15, 1969**, with its headquarters located in **Bengaluru**, Karnataka.

The Indian Space Research Organisation functions under the **Department of Space**, which reports directly to the Prime Minister of India.

REVISION FLASHCARD

ISRO launched the NVS-03 navigation satellite with pyro valves open using a GSLV rocket from Sriharikota.

Syllabus Relevance: Highly relevant for TNPSC Group 1 & Group 2 questions on ISRO space missions, satellite launches, and technological developments.

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