

# Reusable Launch Vehicle Technology Demonstration Programme (RLV-TD)

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## In News

- RLV-TD is **India's first uncrewed flying testbed** developed for the Indian Space Research Organisation's Reusable Launch Vehicle Technology Demonstration Programme. It is a scaled down prototype of an eventual **two-stage-to-orbit reusable launch vehicle**.

## RLV-TD

- It is a **prototype vehicle** developed to achieve the Two-Stage To Orbit (TSTO) Reusable Launch Vehicle (RLV).
- Indian Space Research Organisation's (**ISRO**) **handles the RLV-TD programme**. The Technology Demonstration Programme consists of the development of a hypersonic rocket with air-breathing engines and the reusable launch vehicle
- The first test-flight took place on 23rd May 2016 from Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh
- RLV will **not be used in the Gaganyaan mission**. A Space Capsule will be used in Gaganyaan Mission.
- RLV-TD is a winged body aerospace vehicle that operates in **hypersonic flight regime**. It is capable of launching satellites into orbit around earth and then re-enter the atmosphere
- It has been configured to act as a **flying testbed to evaluate** various technologies, including hypersonic flight, autonomous landing, powered cruise flight.

# MISSION PROFILE

## RLV -TD

### HEX -01

