

Liquid Apogee Motor (LAM)

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About Liquid Apogee Motor:

- It is a small but powerful engine going by the acronym 'LAM' will have a critical role to play in the Indian Space Research Organisation's (ISRO) upcoming Aditya-L1 mission **meant to study the sun.**
- The successful operation of LAM is vital to ISRO's plans to place the **Aditya spacecraft in a halo orbit at Lagrangian point L1.**
- Such engines are used for **orbital adjustment manoeuvres** of satellites/spacecraft in orbit.
- It is developed by the **Liquid Propulsion Systems Centre (LPSC)**, the ISRO centre for liquid and cryogenic propulsion in Thiruvananthapuram.

Key facts about Aditya-L1 mission

- It is the first space-based **Indian mission to study the Sun.**

- It will be launched by the **PSLV-XL launch vehicle**.
- The spacecraft shall be placed in a halo orbit **around the Lagrange point 1** (L1) of the Sun-Earth system, which is about 1.5 million km from the Earth.
- A satellite placed in the halo orbit around the L1 point has the major advantage of **continuously viewing the Sun** without any occultation/eclipses.
- This will provide a greater advantage in observing solar activities and their effect on space weather in real-time.
- The spacecraft carries **seven payloads to observe the photosphere, chromosphere and the outermost layers of the Sun** (the corona) using electromagnetic and particle and magnetic field detectors.

Source: [Smooth operation of Liquid Apogee Motor engine critical to Aditya-L1 success](#)

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